Title (en)

COLOR ELECTROPHORETIC LAYER INCLUDING MICROCAPSULES WITH NONIONIC POLYMERIC WALLS

Title (de)

FARBIGE ELEKTROPHORETISCHE SCHICHT MIT MIKROKAPSELN MIT NICHTIONISCHEN POLYMERWÄNDEN

Title (fr)

COUCHE ÉLECTROPHORÉTIQUE COLORÉE COMPRENANT DES MICROCAPSULES AYANT DES PAROIS POLYMÈRES NON IONIQUES

Publication

EP 4081859 A4 20240605 (EN)

Application

EP 20907398 A 20201222

Priority

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- US 2020066593 W 20201222

Abstract (en)

[origin: US2021191226A1] A capsule comprising a capsule wall and an electrophoretic fluid encapsulated by the capsule wall. The capsule wall comprises a cross-linked nonionic, water-soluble or water-dispersible polymer. The electrophoretic fluid comprises a suspending fluid, first pigment particles, second pigment particles, and third pigment particles. In some embodiments, the electrophoretic fluid includes a fourth electrophoretic particle. The first, second, and third particles are electrically charged, suspended in the suspending fluid, and capable of moving through the suspending fluid upon application of an electric field to the capsule.

IPC 8 full level

G02F 1/167 (2019.01); **C08K 5/07** (2006.01); **C08L 29/04** (2006.01); **C08L 39/06** (2006.01)

CPC (source: EP KR US)

B01J 13/08 (2013.01 - EP KR); **B01J 13/14** (2013.01 - EP KR US); **B01J 13/22** (2013.01 - EP KR); **C09B 67/0033** (2013.01 - EP KR); **C09B 67/008** (2013.01 - EP KR); **C09B 67/009** (2013.01 - EP KR); **C09B 67/0097** (2013.01 - EP KR); **G02F 1/167** (2013.01 - EP KR US); **G02F 1/16757** (2019.01 - EP KR US); **G02F 1/1676** (2019.01 - KR US); G02F 2001/1678 (2013.01 - EP US); G02F 2202/04 (2013.01 - KR US)

Citation (search report)

- [XI] EP 1857869 A2 20071121 - XEROX CORP [US]
- [A] US 7352503 B2 20080401 - YANG SAN-MING [CA], et al
- [A] US 2010020385 A1 20100128 - YAMAMOTO HITOSHI [JP], et al
- [I] DATABASE WPI Week 201401, Derwent World Patents Index; AN 2013-M58405, XP002811445
- [A] DATABASE WPI Week 201057, Derwent World Patents Index; AN 2010-H33867, XP002811446
- See also references of WO 2021133794A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (application)

US 202017130530 A 20201222; CA 3160432 A 20201222; CN 202080085141 A 20201222; EP 20907398 A 20201222; JP 2022538389 A 20201222; JP 2024053287 A 20240328; KR 20227021369 A 20201222; TW 109145687 A 20201223; TW 111124502 A 20201223; US 2020066593 W 20201222; US 202318118483 A 20230307